

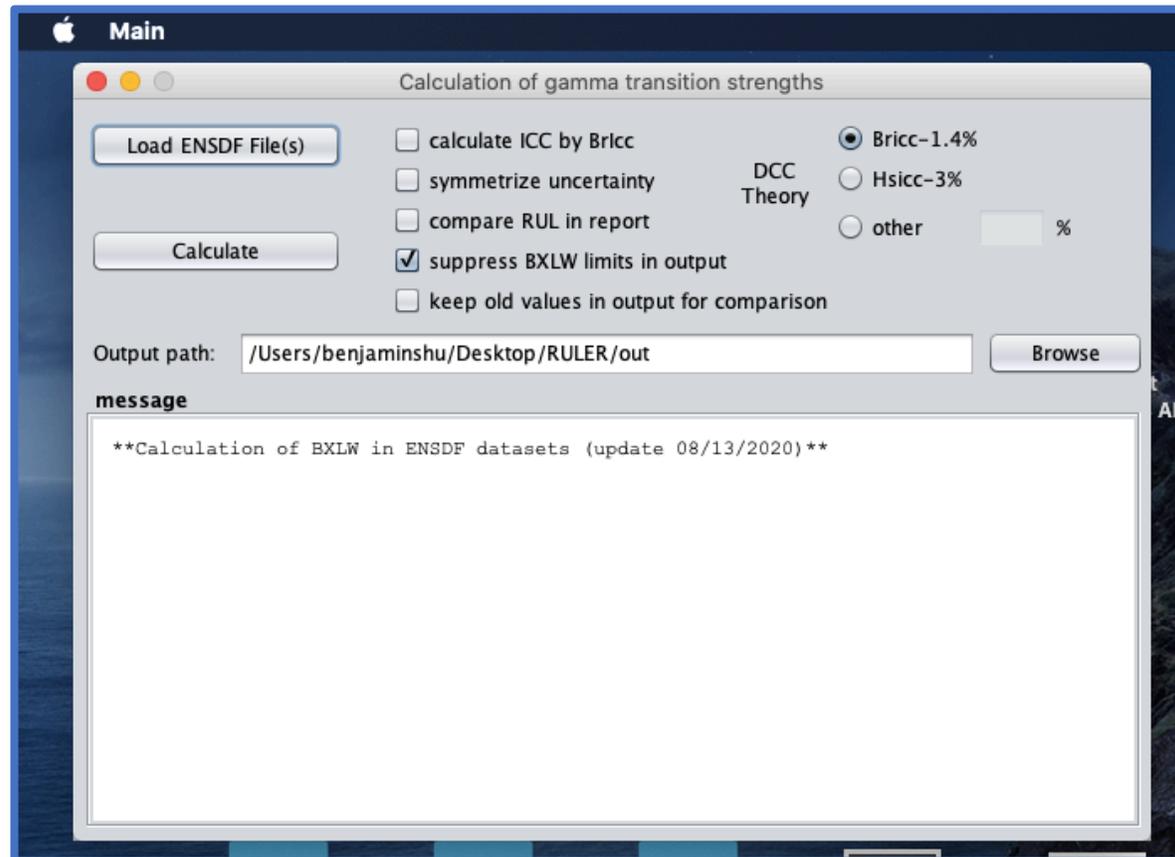
Making RULER Available Online

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JAVA-RULER

- Programmed by Jun Chen to calculate gamma transition strengths



RULER Website

- Built as an interface for Jun Chen's code
 - No installation required
 - Results calculated on demand
- User-defined calculations
 - Add/remove gamma transitions
 - Settings for uncertainty, conversion coefficients, etc.
 - Generates ENSDF file and JAVA-RULER report

Selected Nuclide

- Input fields for defining nuclide excitation state

Nucleus	<input type="text" value="100Mo"/>				
Level $T_{1/2}$	<input type="text" value="80"/>	Units	<input type="text" value="ms v"/>	$\Delta T_{1/2}$	<input type="text" value="0.7"/>

Settings

- Calculation settings

Uncertainty Style: Standard NDS

Calculate ICC by BRICC
 Symmetrize uncertainty
 Compare RUL in report
 Suppress BXLW limits in output
 Compare old values in output

DCC Theory
 BRICC - 1.4%
 HSICC - 3.0%
 Other:

Calculate

Note - RULER will automatically calculate ICC based on input multipolarity and using BrIcc.

RULER Output

- Calculated value(s) and generated ENSDF file

Output Values							
BE3W=1.22E3 +11-10							
Generated ENSDF File							
100MO	ADOPTED LEVELS, GAMMAS						
100MO	L	80.0	10		80.0 MS	7	
100MO	G	80	1	100	E3		

Demonstration

The screenshot shows the RULER web application interface. At the top, there is a browser window with the URL `development2.nndc.bnl.gov/ruler/`. The page header includes the NNDc logo and the text "National Nuclear Data Center" and "BROOKHAVEN NATIONAL LABORATORY". Below the header, there is a navigation bar with links to various NNDc databases: NuDat, NSR, XUNDL, ENSDF, MIRD, ENDF, CSISRS, and Sigma.

The main content area is titled "RULER" and contains the following input fields and controls:

- Nucleus:** A text input field.
- Level $T_{1/2}$:** A text input field.
- Units:** A dropdown menu currently set to "s".
- $\Delta T_{1/2}$:** A text input field.
- γ Transitions:** A section with a "+ Add" button and a table of transition parameters:

$E(\gamma)$ (keV)	$\Delta E(\gamma)$ (keV)	$I(\gamma)$	$\Delta I(\gamma)$	Multipolarity	Mixing Ratio	Δ Mixing Ratio	X Delete
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="X Delete"/>
- Uncertainty Style:** Radio buttons for "Standard" (selected) and "NDS".
- Options:** A list of checkboxes:
 - Calculate ICC by BRICC
 - Symmetrize uncertainty
 - Compare RUL in report
 - Suppress BXLW limits in output
 - Compare old values in output
- DCC Theory:** Radio buttons for "BRICC - 1.4%" (selected), "HSICC - 3.0%", and "Other:" with a text input field.
- Calculate:** A green button.

At the bottom, a note states: "Note - RULER will automatically calculate ICC based on input multipolarity and using Bricc."